

What is claimed is:

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5 1. A method of authenticating information, comprising the steps of:

performing an absolute authentication process for authenticating a recording medium with information for authentication being recorded in a predetermined position therein, according to a first rule at a predetermined time; and

performing an arbitrary authentication process for authenticating said recording medium according to a second rule at an arbitrary time.

2. A method according to claim 1, wherein said absolute authentication process is performed when said recording medium starts being accessed for the first time, and said arbitrary authentication process is performed at least once after said absolute authentication process.

20 3. A method according to claim 1, wherein said first rule in said absolute authentication process is that normal authentication is declared if the information for authentication is detected as being recorded in said predetermined position, and said second rule in said arbitrary authentication process is that normal authentication is declared if  
25 the information for authentication is detected as being not recorded.

4. A method according to claim 3, wherein said absolute authentication process comprises an authentication information detecting process for detecting the information recorded in said predetermined position when said recording medium starts being accessed, and an absolute decision process for declaring normal authentication if the detected information comprises information for authentication, and said arbitrary authentication process comprises an arbitrary information detecting process for detecting information from an arbitrary position except said predetermined position on said recording medium, and an arbitrary decision process for declaring normal authentication if the detected information does not comprise information for authentication.

5. A method according to claim 1, wherein said first rule in said absolute authentication process is that normal authentication is declared if a signal indicating that the information for authentication is recorded in said predetermined position is received, and said second rule in said arbitrary authentication process is that normal authentication is declared if a signal indicating that the information for authentication is not recorded is received.

6. A method according to claim 5, further comprising the step of employing access means for accessing said recording medium and outputting a normal signal if the information for authentication is recorded in said predetermined

position, said absolute authentication process comprising an absolute decision process for declaring normal authentication if said normal signal is received, and said arbitrary authentication process comprising an arbitrary decision process for declaring an abnormal authentication if said normal signal is received.

7. A method according to claim 1, wherein said recording medium comprises a disk-type recording medium, the information for authentication being modulated radially of said recording medium and recorded therein.

8. A method according to claim 4, wherein said recording medium comprises a disk-type recording medium, the information for authentication being modulated radially of said recording medium and recorded therein, and wherein said absolute authentication process and said arbitrary authentication process comprise the steps of:

detecting a modulated component from said recording medium;

detecting the information for authentication from said modulated component; and

deciding whether the detected information for authentication is in agreement with predetermined information and recorded in said predetermined position, and outputting a normal signal if the detected information for authentication is in agreement with predetermined information and recorded

in said predetermined position.

5 9. A method according to claim 6, wherein said recording medium comprises a disk-type recording medium, the information for authentication being modulated radially of said recording medium and recorded therein, and wherein said access means comprises means for performing the steps of:

detecting a modulated component from said recording medium;

10 detecting the information for authentication from said modulated component; and

15 deciding whether the detected information for authentication is in agreement with predetermined information and recorded in said predetermined position, and outputting a normal signal if the detected information for authentication is in agreement with predetermined information and recorded in said predetermined position.

20 10. A method according to claim 1, further comprising the step of:

25 forcibly ending a processing being executed if either said absolute authentication process or said arbitrary authentication process does not result in normal authentication.

11. A method according to claim 1, further comprising the step of:

displaying information representing an authenticated result of either said absolute authentication process or said arbitrary authentication process.

5           12. A disk playback apparatus for playing back information on a disk-type recording medium, comprising:

absolute authentication means for performing an absolute authentication process for authenticating a recording medium with information for authentication being recorded in a predetermined position therein, according to a first rule at a predetermined time; and

arbitrary authentication means for performing an arbitrary authentication process for authenticating said recording medium according to a second rule at an arbitrary time.

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20           13. A disk playback apparatus according to claim 12, wherein said absolute authentication means comprises means for performing said absolute authentication process according to said first rule when said recording medium starts being accessed for the first time, and said arbitrary authentication means comprises means for performing said arbitrary authentication process according to said second rule at least once after said absolute authentication process.

25           14. A disk playback apparatus according to claim 12, wherein said first rule in said absolute authentication process performed by said absolute authentication means is

that normal authentication is declared if the information for authentication is detected as being recorded in said predetermined position, and said second rule in said arbitrary authentication process performed by said arbitrary authentication means is that normal authentication is declared if the information for authentication is detected as being not recorded.

15. A disk playback apparatus according to claim 14, wherein said absolute authentication means comprises authentication information detecting means for detecting the information recorded in said predetermined position when said recording medium starts being accessed, and absolute decision means for declaring normal authentication if the detected information comprises information for authentication, and said arbitrary authentication means comprises arbitrary information detecting means for detecting information from an arbitrary position except said predetermined position on said recording medium, and arbitrary decision means for declaring normal authentication if the detected information does not comprise information for authentication.

16. A disk playback apparatus according to claim 12, wherein said first rule in said absolute authentication process performed by said absolute authentication means is that normal authentication is declared if a signal indicating that the information for authentication is recorded in

5 said predetermined position is received, and said second rule in said arbitrary authentication process performed by said arbitrary authentication means is that normal authentication is declared if a signal indicating that the information for authentication is not recorded is received.

17. A disk playback apparatus according to claim 16, further comprising:

access means for accessing said recording medium and outputting a normal signal if the information for authentication is recorded in said predetermined position;

said absolute authentication means comprising absolute decision means for declaring normal authentication if said normal signal is received; and

said arbitrary authentication means comprising arbitrary decision means for declaring an abnormal authentication if said normal signal is received.

20 18. A disk playback apparatus according to claim 12, wherein the information for authentication is modulated radially of said recording medium and recorded therein.

25 19. A disk playback apparatus according to claim 14, wherein the information for authentication is modulated radially of said recording medium and recorded therein, and wherein said absolute authentication means and said arbitrary authentication means comprise:

modulated component detecting means for detecting a modulated component from said recording medium;

detecting means for detecting the information for authentication from said modulated component; and

5 authentication decision means for deciding whether the detected information for authentication is in agreement with predetermined information and recorded in said predetermined position, and outputting a normal signal if the detected information for authentication is in agreement with predetermined information and recorded in said predetermined position.

20. A disk playback apparatus according to claim 17, wherein the information for authentication is modulated radially of said recording medium and recorded therein, and wherein said access means comprises:

modulated component detecting means for detecting a modulated component from said recording medium;

20 detecting means for detecting the information for authentication from said modulated component; and

25 authentication decision means for deciding whether the detected information for authentication is in agreement with predetermined information and recorded in said predetermined position, and outputting a normal signal if the detected information for authentication is in agreement with predetermined information and recorded in said predetermined position.

21. A disk playback apparatus according to claim 12, further comprising means for forcibly ending a processing being executed if either said absolute authentication process performed by said absolute authentication means or said arbitrary authentication process performed by said arbitrary authentication means does not result in normal authentication.

22. An entertainment apparatus for performing processing operations using programs and data reproduced from a recording medium, comprising:

absolute authentication means for performing an absolute authentication process for authenticating a recording medium with information for authentication being recorded in a predetermined position therein, according to a first rule at a predetermined time; and

arbitrary authentication means for performing an arbitrary authentication process for authenticating said recording medium according to a second rule at an arbitrary time.

23. An entertainment apparatus according to claim 22, wherein said absolute authentication means comprises means for performing said absolute authentication process according to said first rule when said recording medium starts being accessed for the first time, and said arbitrary authentication means comprises means for performing said arbitrary authentication process according to said second rule at

least once after said absolute authentication process.

5 24. An entertainment apparatus according to claim 22, wherein said first rule in said absolute authentication process performed by said absolute authentication means is that normal authentication is declared if the information for authentication is detected as being recorded in said predetermined position, and said second rule in said arbitrary authentication process performed by said arbitrary authentication means is that normal authentication is declared if the information for authentication is detected as being not recorded.

20 25. An entertainment apparatus according to claim 24, wherein said absolute authentication means comprises authentication information detecting means for detecting the information recorded in said predetermined position when said recording medium starts being accessed, and absolute decision means for declaring normal authentication if the detected information comprises information for authentication, and said arbitrary authentication means comprises arbitrary information detecting means for detecting information from an arbitrary position except said predetermined position on said recording medium, and arbitrary decision means for declaring normal authentication if the detected information  
25 does not comprise information for authentication.

26. An entertainment apparatus according to claim 22,  
wherein said first rule in said absolute authentication  
process performed by said absolute authentication means is  
that normal authentication is declared if a signal indicat-  
ing that the information for authentication is recorded in  
said predetermined position is received, and said second  
rule in said arbitrary authentication process performed by  
said arbitrary authentication means is that normal authenti-  
cation is declared if a signal indicating that the informa-  
tion for authentication is not recorded is received.

27. An entertainment apparatus according to claim 26,  
further comprising:

access means for accessing said recording medium and  
outputting a normal signal if the information for authenti-  
cation is recorded in said predetermined position;

said absolute authentication means comprising absolute  
decision means for declaring normal authentication if said  
normal signal is received; and

said arbitrary authentication means comprising arbi-  
trary decision means for declaring an abnormal authentica-  
tion if said normal signal is received.

28. An entertainment apparatus according to claim 22,  
wherein said recording medium comprises a disk-type record-  
ing medium, the information for authentication being modu-  
lated radially of said recording medium and recorded

therein.

29. An entertainment apparatus according to claim 24, wherein said recording medium comprises a disk-type recording medium, the information for authentication being modulated radially of said recording medium and recorded therein, and wherein said absolute authentication means and said arbitrary authentication means comprise:

modulated component detecting means for detecting a modulated component from said recording medium;

detecting means for detecting the information for authentication from said modulated component; and

authentication decision means for deciding whether the detected information for authentication is in agreement with predetermined information and recorded in said predetermined position, and outputting a normal signal if the detected information for authentication is in agreement with predetermined information and recorded in said predetermined position.

30. An entertainment apparatus according to claim 27, wherein said recording medium comprises a disk-type recording medium, the information for authentication being modulated radially of said recording medium and recorded therein, and wherein said access means comprises:

modulated component detecting means for detecting a modulated component from said recording medium;

detecting means for detecting the information for authentication from said modulated component; and

authentication decision means for deciding whether the detected information for authentication is in agreement with predetermined information and recorded in said predetermined position, and outputting a normal signal if the detected information for authentication is in agreement with predetermined information and recorded in said predetermined position.

31. An entertainment apparatus according to claim 22, further comprising means for forcibly ending a processing being executed if either said absolute authentication process performed by said absolute authentication means or said arbitrary authentication process performed by said arbitrary authentication means does not result in normal authentication.

32. An entertainment apparatus according to claim 22, further comprising display means for displaying information representing an authenticated result from either said absolute authentication means or said arbitrary authentication means.